

Appl. No.: 09/944,165

Amendment dated February 27, 2006

Reply to Office Action of October 27, 2005

Listing of Claims

1. (Currently Amended) A handheld device, comprising:
a housing;
a display screen on the front of the device;
a first user input control on the back of the device, wherein the first user input control detects a direction of first user input; and
a second user input control on the back of the device, wherein the second user input control detects a direction of second user input;
wherein, when user input is received through the first user input control, content on the display screen is panned in a direction responsive to the detected direction of the first received user input, and
wherein, when user input is received through the second user input control, content on the display screen is zoomed in or out responsive to the detected direction of the second received user input, the content on the display screen being zoomed in steps defined by a zoom-ratio, the zoom-ratio varying between a predetermined maximum zoom-ratio and a predetermined minimum zoom-ratio,
wherein said zoom-ratio is defined by a content application.
2. (Canceled).
3. (Original) The device of claim 1, wherein the controls comprise a touch pad.
4. (Original) The device of claim 1, wherein the controls comprise a trackball.
5. (Original) The device of claim 1, wherein at least one of the controls comprises a roller wheel.
6. (Original) The device of claim 1, wherein the controls comprise a joystick.

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7. (Original) The device of claim 1, wherein the controls comprise a keypad button.

8. (Original) The device of claim 1, wherein the first and second controls are each located in a position that, when a user is holding the device with both hands on either side of the display screen, enables the user to manipulate one control with the user's right hand and one control with the user's left hand.

~~9-8.~~ (Canceled).

~~10-9.~~ (Currently Amended) A method for manipulating content displayed on a display screen of a handheld device, comprising the steps of:

(i) when first user input is received through a first user input control capable of detecting a direction of user input, panning content on a display screen in a direction responsive to the detected direction of the first user input, and

(ii) when second user input is received through a second user input control capable of detecting a direction of user input, content on the display screen is zoomed in or out responsive to the detected direction of the second user input, the content on the display screen being zoomed in steps defined by a zoom-ratio, the zoom-ratio varying between a predetermined maximum zoom-ratio and a predetermined minimum zoom-ratio,

wherein first and second user input controls are located on the back of the device,

and wherein the display screen is located on the front of the device, and

wherein each input control comprises a touchpad.

11. – 16. (Canceled).

17. (Original) The method of claim 10, wherein the first and second controls are each located in a position that, when a user is holding the device with both hands on either side of the display screen, enables the user to manipulate one control with the user's right hand and one control with the user's left hand.

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18. (Canceled).

19. (Previously Presented) A handheld device, comprising:

a housing;

a display screen on a front side of the housing;

a first touch pad attached to a back side of the housing; and

a second touch pad attached to the back side of the housing;

wherein, when first user input is received through the first touch pad, content on the display screen is panned horizontally responsive to a horizontal component of the first received user input, and content on the display screen is panned vertically responsive to a vertical component of the first received user input,

wherein, when second user input is received through the second touch pad, content on the display screen is zoomed responsive to at least one of a horizontal component and a vertical component of the received second user input, the content on the display screen being zoomed in steps defined by a zoom-ratio, the zoom-ratio varying between a predetermined maximum zoom-ratio and a predetermined minimum zoom-ratio.

20. (Canceled).

21. (Previously Presented) The device according to claim 19, wherein horizontal panning is in a same direction as the received horizontal component of the first received user input, and wherein vertical panning is in a same direction as the received vertical component of the first received user input, thereby allowing the user to interact with the display as if the user is moving a displayed document with the user's finger.

22. (Previously Presented) A handheld device, comprising:

a housing;

a display screen on a front portion of the housing;

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a first touch pad attached to a back portion of the housing; and

a second touch pad attached to the back portion of the housing;

wherein, when first user input is received through the first touch pad, content on the display screen is panned horizontally responsive to a horizontal component of the first received user input, and content on the display screen is panned vertically responsive to a vertical component of the first received user input,

wherein, when second user input is received through the second touch pad, content on the display screen is zoomed responsive to at least one of a horizontal component and a vertical component of the received second user input, the content on the display screen being zoomed in steps defined by a zoom-ratio, the zoom-ratio varying between a predetermined maximum zoom-ratio and a predetermined minimum zoom-ratio,

wherein the first touchpad is located on the back of the device in such a position that, when a user is holding the device with both hands on either side of the display screen, thumbs to front and four fingers to back, the user can manipulate the first touchpad with one or more of the four fingers of a first hand of the user, and

wherein the second touchpad is located on the back of the device in such a position that, when the user is holding the device with both hands on either side of the display screen, thumbs to front and four fingers to back, the user can manipulate the second touchpad with one or more of the four fingers of the second hand of the user.

23. (Currently Amended) A handheld device, comprising:

a housing;

a display screen on a first side of the device;

a first user input ~~control-touch pad~~ located on an opposite side of the device directly behind the display screen, wherein the first user input ~~control-touch pad~~ detects a direction of first user input; and

a second user input ~~control-touch pad~~ located on the opposite side of the device directly behind the display screen, wherein the second user input ~~control-touch pad~~ detects a direction of second user input;

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wherein, when user input is received through the first user input ~~control~~touch pad, content on the display screen is panned in a direction responsive to the detected direction of the first received user input, the content on the display screen being zoomed in steps defined by a zoom-ratio, the zoom-ratio varying between a predetermined maximum zoom-ratio and a predetermined minimum zoom-ratio, and

wherein, when user input is received through the second user input ~~control~~touch pad, content on the display screen is zoomed in or out responsive to the detected direction of the second received user input.

24. (Currently Amended) The device of claim 23, wherein the first and second ~~controls-touch pads~~ are each located in a position that, when a user is holding the device with both hands on either side of the display screen, enables the user to manipulate one ~~control-touch pad~~ with the user's right hand and one ~~control-touch pad~~ with the user's left hand.

25. (Currently Amended) A method for manipulating content displayed on a display screen of a handheld device, comprising the steps of:

(i) when first user input is received through a first user input ~~control-touch pad~~ capable of detecting a direction of user input, panning content on a display screen in a direction responsive to the detected direction of the first user input; and

(ii) when second user input is received through a second user input ~~control-touch pad~~ capable of detecting a direction of user input, content on the display screen is zoomed in or out responsive to the detected direction of the second user input, the content on the display screen being zoomed in steps defined by a zoom-ratio, the zoom-ratio varying between a predetermined maximum zoom-ratio and a predetermined minimum zoom-ratio,

wherein first and second user input ~~controls-touch pads~~ are located on an opposite side of the device directly behind the display screen.

26. (Currently Amended) The method of claim 25, wherein the first and second ~~controls-touch pads~~ are each located in a position that, when a user is holding the device with

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both hands on either side of the display screen, enables the user to manipulate one ~~control-touch pad~~ with the user's right hand and one ~~control-touch pad~~ with the user's left hand.

27. (Previously Presented) A handheld device, comprising:

a housing;

a display screen on a front side of the housing;

a first touch pad attached to a back side of the housing directly behind the display screen;

and

a second touch pad attached to the back side of the housing directly behind the display screen;

wherein, when first user input is received through the first touch pad, content on the display screen is panned horizontally responsive to a horizontal component of the first received user input, and content on the display screen is panned vertically responsive to a vertical component of the first received user input,

wherein, when second user input is received through the second touch pad, content on the display screen is zoomed responsive to at least one of a horizontal component and a vertical component of the received second user input, the content on the display screen being zoomed in steps defined by a zoom-ratio, the zoom-ratio varying between a predetermined maximum zoom-ratio and a predetermined minimum zoom-ratio, and

wherein the first and second touch pads are each located in a position that, when a user is holding the device with both hands on either side of the display screen, enables the user to manipulate one touch pad with the user's right hand and one touch pad with the user's left hand.

28. – 29. (Canceled)

30. (Currently Amended) A computer-readable medium comprising executable code for performing a method for manipulating content displayed on a display screen of a handheld device, comprising the steps of:

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(i) when first user input is received through a first user input ~~control~~-touch pad capable of detecting a direction of user input, panning content on a display screen in a direction responsive to the detected direction of the first user input, and

(ii) when second user input is received through a second user input ~~control~~-touch pad capable of detecting a direction of user input, content on the display screen is zoomed in or out responsive to the detected direction of the second user input, the content on the display screen being zoomed in steps defined by a zoom-ratio, the zoom-ratio varying between a predetermined maximum zoom-ratio and a predetermined minimum zoom-ratio,

wherein first and second user input ~~controls~~-touch pads are located on the back of the device,

and wherein the display screen is located on the front of the device.

31. (Previously Presented) The device of claim 1 wherein each zoom-ratio is associated with one or more corresponding depths and wherein a first content corresponds to a first depth and a second content corresponds to a second depth.

32. (Currently Amended) The device of claim 31, wherein the device displays the first content when the first depth corresponds to a current zoom-ratio, and wherein the device displays the second content when the second depth corresponds to ~~the~~ a new current zoom-ratio.

33. (Previously Presented) The device of claim 32 wherein the second content displays an object not present in the first content.

34. (Previously Presented) The device of claim 31 wherein said first content is displayed on the display screen only within a predetermined range of zoom-ratios.

35. (Previously Presented) The device of claim 31 wherein the display at different depths provides a simulated three-dimensional effect on the display screen.

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36. (Canceled).